

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte WILLIAM C. HILL, JR.

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Appeal No. 96-1602  
Application 08/168,669<sup>1</sup>

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ON BRIEF

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Before CALVERT, STAAB and McQUADE, Administrative Patent Judges.

STAAB, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the final rejection of claims 1-9. Claims 10 and 11, the only other claims pending in the application, have been withdrawn from

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<sup>1</sup> Application for patent filed December 16, 1993. According to appellant, the application is a division of 08/050,507, filed April 20, 1993, now U.S. Patent No. 5,271,633, issued December 21, 1993.

further consideration under 37 CFR § 1.142(b) as not readable on the elected invention. Upon further consideration, the examiner objected to claims 5, 6, 8 and 9, but indicated that they would be allowable if rewritten in independent form. Accordingly, only the rejections of claims 1-4 and 7 remain before us for review.

Appellant's invention pertains to a skate bearing insert. Independent claim 1, a copy of which is found in the appendix to appellant's main brief, is illustrative of the appealed subject matter.

The references of record relied upon by the examiner in support of rejections under 35 U.S.C. § 103 are:

Muck	1,393,813	Oct. 18, 1921
Skorka	1,572,567	Feb. 9, 1926
Parrish	2,073,708	Mar. 16, 1937
Hoerle	2,105,354	Jan. 11, 1938
Marsh	3,348,289	Oct. 24, 1967
Miyazawa et al. (Miyazawa)	4,940,342	Jul. 10, 1990

The following rejections under 35 U.S.C. § 103 are before us for review:<sup>2,3</sup>

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<sup>2</sup>Rejections (b) and (c) are new rejections made for the first time in the examiner's answer. In the statement of these new rejections in the answer, the examiner inadvertently identified dependent claim 9 rather than independent claim 7 as one of the claims subject to the new rejections.

<sup>3</sup>The final rejection also included a rejection of the appealed claims as being unpatentable over Muck in view of Marsh and Miyazawa. In that this rejection was not repeated in the answer, it is presumed to have been withdrawn. See *Ex parte Emm*, 118 USPQ 180, 181 (Bd. App. 1957).

(a) claims 1-4 and 7, unpatentable over Skorka in view of Parrish, Muck, Marsh and Miyazawa;

(b) claims 1-4 and 7, unpatentable over Hoerle in view of Marsh and Miyazawa; and

(c) claims 1-4 and 7, unpatentable over Skorka in view of Hoerle, Marsh and Miyazawa.

Considering first rejection (a), independent claim 1 calls for, inter alia, “means along the inner circumference of the inner race for cooperating with a bearing insert tool for removing and inserting the bearing insert from the hub of the skate wheel . . . .” Independent claim 7 contains a similar limitation but specifies the means in question as being “an annular inner groove formed within the central axis bore along the inner circumference of the inner race . . . .” The examiner concedes that Skorka, the primary reference, does not teach this claimed feature. Nevertheless, the examiner has taken the position that

Miyazawa et al. discloses using a groove 221a for cooperation with a bearing puller to remove a bearing. Accordingly, one having ordinary skill in the art would have found it obvious to provide a groove on the bearing inserts of Skorka in order to provide for quick and easy removal of the inserts by engagement of the groove with a bearing puller. [Answer, page 4.]

Recognizing that this modification would not necessarily result in a construction that would correspond to the claimed subject matter (the claims call for the means for removing and inserting, or annular groove, to be located along the inner circumference of the inner

bearing race whereas Miyazawa's groove is located on the outer circumference of the outer bearing race), the examiner further posits that

. . . one having ordinary skill in the art is deemed to be of sufficient intelligence to realize that the environment in which the bearing inserts are utilized will dictate the location of this groove. Thus, because the inner and outer circumferences of the inner race and the inner circumference of the outer race of Skorka are the only surfaces accessible to a bearing puller once axle 10 has been removed[,] one having ordinary skill in the art would have found it obvious to provide the groove on any of these circumferences. [Answer, page 4.]

A rejection based on § 103 must rest on a factual basis, with the facts being interpreted without hindsight reconstruction of the invention from the prior art. In making this evaluation, the examiner has the initial duty of supplying the factual basis for the rejection he advances. He may not, because he doubts that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in the factual basis. See *In re Warner*, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967), *cert. denied*, 389 U.S. 1057 (1968).

In the present instance, even if we were to accept the examiner's foundation position that it would have been obvious to provide a groove on the bearing inserts of Skorka for the purpose taught by Miyazawa at column 3, lines 33-41, we cannot accept the examiner's further position that it would also have been obvious to one of ordinary skill in the art to provide a bearing puller groove at the specific location called for by the appealed claims (i.e., along the inner circumference of the inner bearing race). The only applied

reference relied upon by the examiner for a teaching of means for cooperating with a bearing insert tool for removing and inserting a bearing insert is Miyazawa, which discloses a bearing puller groove 221a provided on the outer circumference of the outer bearing race for this purpose. In our opinion, the examiner's position to the effect that it would have been within the realm of skill in the art to provide the bearing puller groove of Miyazawa on the inner circumference of the inner bearing race of Skorka is speculative, based on hindsight, and not fairly suggested by the reference teachings themselves.

We have also reviewed the Parrish, Muck and Marsh references applied by the examiner against the appealed claims in rejection (a), but find nothing therein which makes up for the deficiencies of Skorka and Miyazawa noted above. Accordingly, we cannot sustain the examiner's rejection of the appealed claims under 35 U.S.C. § 103 as being unpatentable over Skorka in view of Parrish, Muck, Marsh and Miyazawa.

Turning to rejection (c), this rejection is likewise founded in part on the proposition that it would have been obvious to one of ordinary skill in the art to provide a groove on the inner circumference of the inner race of Skorka's bearing insert in view of Miyazawa. For the reasons discussed above, the examiner's position in this regard is not well taken. Further, the Hoerle, and Marsh references additionally relied on do not make up for the deficiencies of Skorka and Miyazawa. It follows that this rejection also cannot be sustained.

As to rejection (b), we observe that the inner races 17, 18 of the bearing inserts of Hoerle, the primary reference, are welded together (page 1, right column, lines 6-8), such that the bearing inserts form a unified structure with the skate wheel. Accordingly, there would be no logical reason in the first instance for providing a bearing puller groove of the sort disclosed by Miyazawa at element 221a in Hoerle at any location, much less at the specific location called for in the appealed claims. Hence, rejection (b) likewise cannot be sustained.

The decision of the examiner is reversed.

**Reversed.**

IAN A. CALVERT  
Administrative Patent Judge

LAWRENCE J. STAAB  
Administrative Patent Judge

JOHN P. McQUADE  
Administrative Patent Judge

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Herbert W. Larson  
7381 114th Avenue North  
Suite 406  
Largo, FL 34643